

In the Claims

1. (Currently amended) A photosensitive resin printing plate material comprising a support provided thereon at least a photosensitive resin layer and an optical density changing layer comprising a composition containing a metal oxide or a composition containing a heat-decomposable compound and a light-to-heat converting substance, wherein the composition evaporates or discolors, and the optical density changing layer yields an optical density of 2.0 or higher before irradiating a laser radiation thereto, and 0.5 or lower after laser is irradiated thereto, further having a peelable thermoplastic film layer interposed between the photosensitive resin layer and the optical density changing layer such that the plate material has a peel strength of 0.5-20 g/cm between the peelable thermoplastic film and the photosensitive resin layer.

2. (Original) A photosensitive resin printing plate material as claimed in Claim 1, wherein the film layer has a thickness in a range of 1 to 30 μm .

3. (Cancelled)

4. (Previously Presented) A photosensitive resin printing plate material as claimed in Claim 1, wherein the photosensitive resin layer is provided at a thickness in a range of from 0.1 to 10 mm, and is a layer photocurable by a light having a wavelength in a range of from 300 to 400 nm.

5. (Currently Amended) A photosensitive resin printing plate material as claimed in Claim 1, wherein a film stripping layer is incorporated between the photosensitive resin layer and the peelable thermoplastic film layer.

6. (Currently Amended) A method for producing a photosensitive resin printing plate, comprising at least the following steps in this order,

a step of forming an image on an optical density changing layer which comprises a composition containing a metal oxide or a composition containing a heat-decomposable compound and a light-to-heat converting substance positioned adjacent a peelable thermoplastic film layer that is positioned adjacent a photosensitive resin layer, wherein the composition evaporates or discolors, and the optical density changing layer yields an optical density of 2.0 or higher before irradiating a laser radiation thereto, and 0.5 or lower after laser is irradiated thereto,

a step of forming a latent image by exposure of the photosensitive resin layer through the image,

a step of peeling off the peelable thermoplastic film layer and the optical density changing layer from the photosensitive resin layer, and

a step of developing the photosensitive resin layer.

7. (Previously Presented) A photosensitive resin printing plate material as claimed in Claim 2, wherein the photosensitive resin layer is provided at a thickness in a range of from 0.1 to 10 mm, and is a layer photocurable by a light having a wavelength in a range of from 300 to 400 nm.

8. (Currently Amended) A method for producing a photosensitive resin printing plate from the photosensitive resin printing plate material of Claim 2, comprising at least the following steps in this order,

a step of forming an image on an optical density changing layer,

a step of forming a latent image by exposure of the photosensitive resin layer through the image,

a step of peeling off the peelable thermoplastic film layer and the optical density changing layer from the photosensitive resin layer, and

a step of developing the photosensitive resin layer.

9. (Currently Amended) A method for producing a photosensitive resin printing plate from the photosensitive resin printing plate material of Claim 4, comprising at least the following steps in this order,

a step of forming an image on an optical density changing layer,

a step of forming a latent image by exposure of the photosensitive resin layer through the image,

a step of peeling off the peelable thermoplastic film layer and the optical density changing layer from the photosensitive resin layer, and

a step of developing the photosensitive resin layer.

10. (Currently Amended) The photosensitive resin printing plate material as claimed in Claim 1, wherein the peelable thermoplastic film layer is formed from polyethylene, polypropylene, polyethylene terephthalate or polybutylene terephthalate.

11. (Currently Amended) The method for producing a photosensitive resin printing plate as claimed in Claim 6, wherein the peelable thermoplastic film layer is formed from polyethylene, polypropylene, polyethylene terephthalate or polybutylene terephthalate.